DOCUMENT RESUME

ED 145 362 CS 003 561

AUTHOR Rowell, E. H.
TITLE Are Reading Tests Sexist? An Investigation into Sex Bias in Three Frequently Used Individualized Reading Tests.
PUB DATE [77]
NOTE 26p.; Study prepared at Rhode Island College; Not available in hard copy due to marginal legibility of original document

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS Basic Reading; Content Analysis; Content Reading; Elementary Secondary Education; Literature Reviews; Reading Materials; *Reading Research; *Reading Tests; *Sex Role; *Sex Sterectypes; *Test Bias

ABSTRACT

A review of the literature indicates that sex-role stereotyping is common in basal readers, in children's novels, and in content-area reading materials. This study analyzed three frequently used individualized reading tests for evidence of sex bias: the Diagnostic Reading Scales, the Durrell Analysis of Reading Difficulty, and the Classroom Reading Inventory. Each test was evaluated according to a frequency count of masculine and feminine nouns and pronouns. Comparisons were also made between the types and numbers of male and female characters, occupations portrayed, and famous people described in each selection. Data (described and presented in tabular form) clearly showed that the three tests exhibited considerable sex bias in language usage, number of animal and human characters of each sex, and male/female status within the selections. Deletion of generic terms did not significantly alter the ratios. In conclusion, it was suggested that test publishers attempt to represent males and females more equally; the validity of sex-biased tests for measuring students' abilities and for establishing ability groups is also questioned. (KS)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
E. H. Rowell
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

ED145362

ARE READING TESTS SEXIST?

An Investigation into Sex Bias in Three Frequently Used Individualized Reading Tests

by
E. H. Rowell, Ph.D.
Assistant Professor

"I don't like to read these. They are all about boys. I like to play outside and do things too." These comments were made by Glenda, during an individualized reading test in which four of the five passages she either read or listened to were primarily about men or boys (Silvaroli Form A passages 4,5,6,7,8).

Fortunately after Glenda verbalized her feelings a short discussion was able to overcome her resistance and she continued with the test. However the look on her face as she listened to a passage that dealt with Courage--the quality men like most (Silvaroli-Form A-Level 8) will forever be etched in the memory of the examiner. And so the words uttered by this young girl led to an investigation of sex bias in three individualized reading tests that are widely used to diagnose the reading needs of both boys and girls.

What about the Glendas--who do not verbalize their feelings? Are we underestimating the reading ability of some students if these tests are indeed biased?

Due to the growing awareness of the damage done to individuals by channeling them into roles according to sex, the subject of sexism in schools has become a major concern. Many types of educational materials have been extensively examined for sex bias including basal readers (Women on Words and Images, Marten and Matlin), picture books (Fishman, Weitzman 1972), children's novels (Nilsen, Tate), and content area reading materials (Weitzman 75).

In general these studies have found a considerable amount of sex-role stereotyping and biased presentation of girls and women. Males are portrayed as main characters in more stories than females in all types of reading materials. Women are observed in few occupations outside the home and girls are frequently seen

CS003561

BEST COPY AVAILABLE

as being less active and competent than boys.

Other studies of classroom materials showed evidence of male bias through language usage. Counts of language usage of school materials showed that male nouns and pronouns were used almost twice as frequently as female nouns and pronouns. (O'Donnell, Malcolm).

Several writers have discussed the general male orientation of the English language (Key, Tiedt, Smith). Although it has been considered grammatically correct to use masculine referents to stand for non-specific persons, recent studies have revealed that children interpret language quite literally. When children see the male pronoun used a generic term, they generally consider the pronoun to refer to a male character and not as a neutral representative of all persons (Kidd).

A major adjunct to education is testing. The use of tests in public schools has increased rapidly in the last fifteen years and the methods in which tests are employed has also multiplied. Reading tests are used to assess and evaluate pupils for instructional purposes, to assign students to leveled groups and classrooms--bluebird, buzzard, eagle--and to identify students who need special diagnostic study and remedial instruction.

There has also been a growing concern about the fairness of tests with respect to various groups in the testing population. Tests may deny many children an equal opportunity. They may foster a narrow conception of ability, place an indelible stamp of inferior intellectual status on a child and ruin the child's self esteem and educational motivation (Kirkland, Linn).

Several recent reviews of educational tests suggest that men and women are not presented equally in these materials. Tittle investigated the occurrence of male and female references in nine different academic achievement tests used for students from kindergarten through the twelfth grade. The generic use of words was counted separately. Of the tests scored, all but one contained a higher number of male references than female refernces (Tittle). Lockheed-Katz conducted a similar in-

vestigation of male and female references in eight major college and graduate school entrance examinations. The same imbalance was found within these tests (Lockheed-Katz).

In the investigation of college and graduate school admissions tests conducted by Lockheed-Katz, the relative status of males and females in test items was noted. Of the twenty-two items out of 1220 which contained both a male and a female character, ten items portrayed the men and women as equal in status; the remaining twelve items showed the men as being higher in status than the women. No item on any of the tests portrayed a woman in a higher status position than a man. Females were referred to as mothers, teachers, secretaries or wives. Males were referred to as lawyers, managers, principals, superintendents, doctors or other professionals. No studies have been found which report any but extreme sex role stereotyping in test items (Lockheed-Katz). Tittle reported in her study that women are portrayed almost exclusively as homemakers or in the pursuit of hobbies and that some test items imply that the majority of professions are closed to women (Tittle).

In the daily use of diagnostic tools the problems imposed by this bias are often overlooked. Despite the limitations of tests, students, parents, teachers, and other users of test scores tend to believe that they are fairly accurate and should be used in decision making (Goslin). In view of the importance of the skill of reading and in light of these earlier analyses, it seemed imperative to see if individualized reading inventories also contained sex-bias.

The purpose of this study was to analyze three frequently used individualized reading tests for evidence of bias as indicated by four different factors:

1. The actual distribution of test selections dealing with male and female referents.
2. Evidence of content bias as measured by language usage.
3. The ratios of male to female human and animal characters.
4. The status of males and females within the test selections.

PROCEDURES

The tests analyzed in this study were the Diagnostic Reading Scales devised by George D. Spache published in 1963 and revised in 1972 by the California Test Bureau; the Durrell Analysis of Reading Difficulty by Donald Durrell copyrighted in 1937 and 1955 by Harcourt, Brace and World, Inc., New York; and the Classroom Reading Inventory by Nicholas J. Silvaroli first published in 1965 by William C. Brown Company Publishers. These tests were selected because they are often used by reading teachers to diagnose students' reading difficulties and to estimate their reading levels before placing them in materials or assigning them to appropriate reading groups.

Each selection in the test batteries was first coded as to the types of referents included: neither male nor female, both male and female, all male, regular male excluding generic terms, female.

An estimate of content bias was then obtained by determining if through language usage males were referred to more often than females. Language usage was determined by the ratio of counts of frequencies of male nouns and pronouns to female nouns and pronouns. Each common and proper noun and pronoun was identified which specifically referred to a male or female. Each generic noun or pronoun was identified as generic.

An example of generic usage is... "if a student is trying to find only one word on a page he..." (Spache) or usage of such terms as "layman, mankind." Examples such as these may result from problems inherent in the English language and may not be intentional examples of sex bias on the part of the test developer.

A comparison was made between the ratio of ALL nouns and pronouns (excluding generic nouns and pronouns). Ratios of counts of frequencies of male nouns and pronouns to female nouns and pronouns were computed: one ratio included ALL nouns and pronouns, a second ratio included only REGULAR nouns and pronouns.

Ratio figures greater than 1.00 indicated proportionately more male referents than female. Ratios less than 1.00 indicated more female referents than male.

To determine the status of males and females within the test batteries, information was gathered for each selection which included the ratio of male to female human characters and animal characters. A list was then formulated containing each male and female character along with the activities in which they were engaged. Comparisons were made between types and number of male and female characters, occupations, and famous personages.

FINDINGS

Each complete test battery had a higher frequency of selections with only male referents than with female referents than with female referents, and in the Classroom Reading Inventory, Forms A and C; the Diagnostic Reading Scales, Forms B and D; and the Listening and Supplementary Sections of the Durrell Analysis there were no selections that dealt exclusively with females (Table I).

TABLE I

Gender of Referents in Each Subtest:
Ratios of ALL and Regular Male Noun and Pronoun Referents to
Female Noun and Pronoun Referents

Test	Number of Selections in each subtest	Gender of Referents in Each Subtest: Neither M nor F	Both M & F	Male/Female ALL nM/nF=Ratio		GENERAL nm/nF=Ratio	
Classroom Reading Inventory							
Form A	10	3	2	5/0	-	5/0	-
Form B	10	3	3	3/1	3.00	2/1	2.00
Form C	10	3	2	13/1		3/0	-
Total	30	9	7	13/1	13.00	10/1	10.00
Diagnostic Reading Scales							
Form A & C	11	1	2	7/1	7.00	6/1	6.00
Form B & D	11	2	5	4/0	-	0/0	-
Total	22	3	7	11/1	11.00	6/1	6.00
Durrell Analysis of Reading Difficulty							
Oral	8	1	1	5/1	5.00	5/1	5.00
Silent	8	1	2	4/1	4.00	4/1	4.00
Listening	7	0	1	6/0	-	6/0	-
Supplementary	8	1	0	7/0	-	6/0	-
Total	31	3	4	22/2	11.00	21/2	10.50

Each test battery also contained a much higher frequency of male referents than female referents (Table 2). In only two subtests were there more female terms used than male; Forms B & D of the Diagnostic Reading Scales had more female pronouns and the silent selection of the Durrell Analysis of Reading Difficulty had more female common nouns.

The distribution of ratios of proper nouns indicates clearly that males were referred to by name much more frequently than females. In no test battery were girls referred to more often by their proper name than boys.

The bias in favor of males did not appear to be primarily a function of generic language usage, but rather of the selection of subject content. Few differences were found between the ratios based on ALL nouns and pronouns and those based on REGULAR nouns and pronouns only.

Table 2

Ratios of All and Regular Male Noun and Pronoun Referents to Female Noun and Pronoun Referents

Test	All Referents Nouns-Pronouns nM/nF=Ratio		Regular Referents Nouns-Pronouns nM/nF=Ratio		All Pronouns nM/nF=Ratio		Regular Pronouns nM/nF=Ratio		Proper Nouns nM/nF=Ratio		All Common Nouns nM/nF=Ratio		Regular Common Nouns nM/nF=Ratio	
Classroom Reading Inv.														
Form A	24/2	12.00	23/2	11.50	3/0	-	3/0	-	11/1	11.00	10/1	10.00	9/1	9.00
Form B	50/4	12.50	42/4	10.50	20/0	-	13/0	-	20/2	10.00	10/2	5.00	9/2	4.50
Form C	20/2	10.00	16/2	8.00	4/0	-	1/0	-	13/1	13.00	3/1	3.00	2/1	2.00
Total	94/8	11.75	81/8	10.12	27/0	-	17/0	-	44/4	11.00	23/4	5.75	20/4	5.00
Diagnostic Reading Scales														
Form A & C	104/23	4.53	95/23	4.13	58/16	3.62	49/16	3.06	34/6	5.67	12/2	6.00	12/2	6.00
Form B & D	44/32	1.38	38/32	1.19	20/23	.87	14/23	0.61	11/8	1.38	13/1	13.00	13/1	13.00
Total	148/55	2.69	133/55	2.41	78/39	2.00	63/39	1.61	45/14	3.21	25/3	8.33	25/3	8.33
Durrell Analysis of Reading Difficulty														
Oral	28/6	4.67	28/6	4.67	12/3	4.00	12/3	4.00	7/2	3.50	9/1	9.00	9/1	9.00
Silent	16/18	.89	16/18	.89	7/7	1.00	7/7	1.00	2/0	-	7/11	.64	7/11	.64
Listening	38/4	9.50	38/4	9.50	17/4	4.25	17/4	4.25	10/0	-	10/0	-	10/0	-
Supplementary	42/0	-	40/0	-	24/0	-	24/0	-	10/0	-	8/0	-	6/0	-
Total	124/28	4.43	122/28	4.36	60/14	4.28	60/14	4.28	29/2	14.50	34/12	2.83	32/12	2.67

Each total test battery contained a higher frequency of male human and animal characters. In no subtest were there more female human characters than males and in only one subtest, the oral selection of the Durrell Analysis of Reading Difficulty, were there more female animal characters than males (Table 3).

Table 3

Ratios of Male Human and Male Animal Characters

versus

Female Human and Female Animal Characters

Tests	Human Characters nM/nF=Ratio		Animal Characters nM/nF=Ratio	
Classroom Reading Inventory				
Form A	16/3	5.33	1/0	-
Form B	13/4	3.25	4/0	-
Form C	8/1	8.00	2/1	2.00
Total	37/8	4.62	7/1	7.00
Diagnostic Reading Scales				
Forms A & C	43/2	21.50	2/1	2.00
Forms B & D	18/4	4.25	1/1	1.00
Total	61/6	10.16	3/2	1.50
Durrell Analysis of Reading Difficulties				
Oral	24/0	-	1/2	.50
Silent	9/4	2.25	2/1	2.00
Listening	2014/0	-	1/1	1.00
Supplementary	15/0	-	1/0	-
Total	2062/4	515.50	5/4	1.25

The imbalance of male to female characters can be clearly seen in List 1 which gives the types of male and female characters, occupations and famous personages included in each subtest and in Lists 2, 3 and 4 which compare the male and female roles in each selection in the three test batteries.

Men were engaged in thirty-one different occupations while adult women were teachers, wives, or mothers. Men were pictured swimming, playing golf, fixing tires for women, playing baseball, training horses, proving their courage, bobsledding, going for airplane rides and trying to catch rebel horses. Women were mentioned as being interested in skydiving. The activities actually engaged in by adult women were turning on a TV, speaking to children and driving a car.

Mother was noticeably absent from the three reading tests. She appeared in only one selection. In her sole appearance, mother was late to pick up her daughter at the train station because of a flat tire that was fixed by a man, Father however went on airplane rides and to the car wash with his son, gave his daughter a pony for her birthday, and took her to the circus.

Nineteen famous men were mentioned by name in the three tests surveyed. No famous women were referred to in any of the batteries.

Females were portrayed almost exclusively as girls either going to school or watching such things as a car, the circus or a parade. They were usually alone or accompanied by father and were never found in the company of other girls. The most rigorous activity engaged in by young girls was skipping and it was noted that the game of basketball had to be modified for girls to make it less strenuous.

In numerous activity-centered items, boys were shown playing with dogs and other boys, going on trips to the woods, zoo, and city market; riding bikes and airplanes, playing ball, jumping out of bed, camping out, and feeding and rescuing female cats. In the three selections which referred to both boys and girls, boys were shown identifying objects for girls or inviting them to go for a ride or help catch a fish.

Female animals were shown in a variety of activities. Cows gave milk, ate grass, slept and scared boys. Mother birds and chickens were shown as hard-working and courageous beings. The mother bird flew worms to her hungry offspring and the hen chased a small dog away from her brood. Female kittens and cats slept or were rescued by boys and the praying mantis was mentioned because of her unusual size.

Male dogs appeared in six selections. The dogs played with their owners, caught skunks, got lost in the woods and were chased by hens. Male horses appeared in three selections. They did tricks with policeman, worked in a rodeo and defied capture. Bulls were angry and chased people before a fight. The male rabbit jumped and hopped.

The results of this study of sex bias show that the three individualized reading tests are selectively biased against women. The point could be made that more males have reading problems and are therefore screened by these tests. However recent studies of general school populations show that there are large numbers of girls with serious reading problems (Naiden). Can test items that deal predominantly with male figures accurately measure the capabilities of a female student?

The principle of fairness which calls for eliminating discrimination and providing all groups with equal access to education requires that all aspects of education be free from discriminatory material. This requirement should apply to reading tests in particular, as these tests are used to both measure students' reading ability and to place them in appropriate groups and materials. As this bias was found to be primarily a result of subject content selection, an attempt should be made by publishers to have a more equal representation of males and females.

Further research efforts should be made to explore the relationship between sex bias and the accurate measurement of reading ability of both male and female students.

List 1

Types of Male and Female Animals, Human Occupations and Famous People in Each Test Battery

Tests	Males	Females	Human Occupations		Famous People	
			Male	Female	Male	Female
Classroom Reading Inventory	Baby Bird (generic) Bull Ground Cuckoo (generic) Horse Praying Mantis	Praying Mantis	A Baseball Player (father) Fisherman Race Car Builder Race Car Driver Rodeo Rider Seal Trainer Band Member Buyer	(wife) (banshee)	Abner Doubleday Art Arfons Dr. Frankenstein Jim Brosnan	-
Diagnostic Reading Scales	Dog	Cow Bird	Clown Explorer Farmer (father) Fireman Freight Loader Furrier Governor Mason Merchant President Private Secretary Ringmaster Sailor Ship's Boy Soldier Tailor Wild Animal Trainer Workman Zoo Keeper	Teacher	Captain Benson William Clark Sergeant Charles Floyd Thomas Jefferson John Paul (Jones) Meriwether Lewis	-

List 1 (continued)

Types of Male and Female Animals, Human Occupations and Famous People in Each Test Battery

Tests	Males	Females	Human Occupations		Famous People	
			Male	Female	Male	Female
Durrell Analysis of Reading Difficulty	Dog	Cat	Construction Worker	(mother)	Bessemer	-
	Horse	Cow	Fisherman		Columbus	
	Rabbit	Kitten	General		Peter Cooper	
		Hen	Inventor		DeWitt	
			King		Robert Fulton	
			Policeman		James IV	
			President		McKay	
			Soldier		General St. Clair	
					President Washington	

LIST 2

Comparison of Male - Female Portrayals
in Classroom Reading Inventory

Test	Male	Female
ilvaroli: Form A		
PP	Bob (identified car as a work car)	Jane (saw funny little car)
P	Jack, Father (enjoying Jack's first airplane ride)	None
1	None	None
2	Bob Hill (top rodeo rider) Midnight (best horse in show)	None
3	None	None
4	Men (interested in skydiving)	Women (interested in skydiving)
5	Men (expert seal trainers) Fisherman	None
6	None	None
7	Men (bobsledder) (generic?)	None
8	Men (like courage) Primitive males (proved manhood)	None
Silvaroli: Form B		
PP	Tom (owned play car - invited Ann for ride)	Ann (was invited for ride by Tom)
P	None	Mrs. Brown (told children to get in the bus)
1	None	None
2	Bulls (angry balls who chase people before a fight)	None
3	None	None
4	None	None
5	Ground-Cuckoo (helpful to man) (generic?)	None
6	Blase (rebel horse) Men (tried to catch horse) Pete Cook (leader of horse catching expi-	

Comparison of Male - Female Portrayals
in Classroom Reading Inventory

Test	Male	Female
ilvaroli: Form B (continued)		
7	Dr. Frankenstein Art Arfons (built and drove racing car that set a new world's record)	Banshee (howling)
8	Jim Brosnan (white sox pitcher) modern pitcher (holds ball)	Wife (of sports fan) (turns on television)
ilvaroli: Form C		
PP	Bob (fishing	Pam (Bob asked her to help catch the fish)
P	Mr. Green, Tony (washing car at car wash)	None
1	None	None
2	Bill, Jack (boys who went to join baseball team) play kickball and football)	None
3	Baby bird (loudest bird gets most food) (generic?)	None
4	Abner Doubleday (set up rules for playing baseball 1838)	None
5	Male Praying Mantis (smaller than his female partner)	Female partner of Praying Mantis (larger than male)
6	None	None
7	None	None
8	Laymen (don't understanding sportscars) (generic?)	None

List 3

Comparison of Male - Female Portrayals
in Diagnostic Reading Scales

Test	Males	Females
Spache A & C		
1A	None	Mary (school girl on way to school (Saw a red light then a green one)
1C	Farmer (milks cow)	Cow (eats grass, sleeps, wants to be milked, is glad to give milk)
2A	Bob (owner and rider of red wagon) Dog (doesn't like to ride in red wagon)	None
2C	Man (driver of fast moving car, applied brakes to keep from hitting Mary, got angry)	Mary (school girl on way to school, after looking both ways was nearly hit by car)
3A	Bob (goes on trips to woods with dog)	None
	Spotty (dog who scares rabbits, goes off by himself, catches a skunk)	None
3C	Bob (went to zoo. was a little frightened of lions) Zoo Keepers (feeding wolves)	None
4A	Bob (went to city market, wanted to buy a plow)	None
	Men (selling fruits and vegetables, unloading and loading crates, buying fruit)	None
5A	John Paul (ship's boy) Captain Benson (wrote in ship's log) John Paul's brother - a tailor	None
6A	None	None
7A	Good reader (generic?)	None
8A	President Thomas Jefferson (commissioned (expedition to Northwest Territory) Meriwether Lewis Captain William Clark Twenty-six Men Sergent Charles Floyd / Explored Northwest Territory	None

List 3
(Continued)

Comparison of Male - Female Portrayals
in Diagnostic Reading Scales

Test	Males	Females
Spache B & D		
1B	Bob (threw stick) Spot (dog ran after stick)	None
1D	Boy (fed dog)	None
2B	Bob (ran to see fire) Firemen (put out fire)	None
2D	Father (gave Mary a pony for her birthday)	Mary (playing alone waiting for father)
3B	Men (marching in band)	Mary (skipping downtown to watch parade)
3D	Father (took Mary to circus) Clown Ringmaster Wild animal trainer	Mary (watching circus)
4B	Boy - saw nest in tree	Mary's teacher (showed students about birds, bees and flowers) Mother bird (feeding babies)
5B	None	None
6B	Workmen, mason, furrier	England (referred to as her)
7B	None	None
8B	Good reader	None

Comparison of Male/Female Portrayals
in
Durrell Analysis of Reading Difficulty

Test	Males	Females
Durrell Oral		
1	None	Muff (little yellow kitten, drinks milk, sleeps)
2	Little black dog (played and got lost) boy (took dog home)	None
3	6 boys (sleeping in a tent)	cow (ate grass near tent and scored boys)
4	Henry (goes to lake) Ten men in boat (sank boat and swam to shore)	None
5	Robert Fulton (took first long trip in steamboat) fisherman (did not like green boat)	None
6	None	None
7	King James IV (enjoyed golf)	None
8	McKay (McKay sewing machine)	None
	Bessemer (smelting process)	None
Durrell Silent		
1	Peter (white rabbit can jump and hop)	None
2	dog (chased by hen)	hen (took chickens for walk and chased dog)
3	3 boys (built house in woods)	None
4	man in station, man fixing tire	little girl (alone at train station) mother (had flat tire, fixed by man, then drove daughter home)
5	first man who went up in a balloon	None
6	men who made glass beads; man who invented pressed molten glass	None
7	None	girls for whom basketball was modified to be less strenuous
8	None	None

Comparison of Male/Female Portrayals
in
Durrell Analysis of Reading Difficulty

Test	Males	Females
Durrell Listening		
1	boy (fed and rescued cat)	gray cat (rescued from dog by boy)
2	Dick (jumped out of bed on birthday) dog (jumped out of box)	None
3	boy (riding bike got hit by car) boys (playing baseball)	None
4	Peter Cooper (built steam engine)	None
5	general (used kite to build a bridge) man (could be lifted by kite)	None
6	men (soldiers who spread baseball)	None
7	President Washington (felt bitter about St. Clair's defeat) General St. Clair (ordered retreat) men (2,000 soldiers)	None
Durrell Supplementary		
1	Jack (made a house out of a box)	None
2	policeman (owns a horse) Pep (a horse that can do tricks)	None
3	Jack (went to school with one black shoe and one brown)	None
4	man (built house then gave to boys) men (dug cellar) boys (given cellar as a clubhouse)	None
5	None	None
6	Columbus (brought rubber back from America)	None
7	Zeus (father of Gods) men (interested in continuing Olympic games)	None
8	DeWitt (studied economics)	None

BIBLIOGRAPHY

1. Bernstein, Margery R. "The Relationship between Interest and Reading Comprehension" Journal of Educational Research, Vol. 49, 1955 pp. 283-88.

2. Dwyer, Carol A. "Sex Differences in Reading. An Evaluation and a Critique of Current Theories." Review of Educational Research. Fall, 1973, 43, pp. 455-465.

3. Fishman, Ann Stevens. "A Criticism of Sexism in Elementary Readers." Reading Teacher, Feb., 1976, pp. 443-445.

4. Goslin, D. A. Teachers and Testing. New York: Russell Sage Foundation, 1967.

5. Jacobs, C. and Eaton, C. "Sexism in the Elementary School." Today's Education, 1972, 61, 20-22.

6. Key, M. R. "Linguistic Behavior of Male and Female." Linguistics, 1972, 88, 15-31.

7. Kidd, V. "A Study of the Images Produced Through the Use of the Male Pronoun as the Generic." The Rhetoric of Women's Liberation, ED 069 009, Fall 1971.

8. Kirkland, M. C. The Effects of Tests on Students and School. Review of Educational Research, 1971, 41, 303-350.

9. Linn, R. L. "Fair Test Use in Selection." Review of Educational Research, 43, 139-161.

10. Lockheed-Katz. "Sex Bias in Educational Testing: A Sociologists Perspective." ED 098 262, April 1974.

11. Marten, Laurel and Matlin, Margaret. "Does Sexism in Elementary Readers Still Exist?" Reading Teacher, May, 1976, pp. 764-767.

12. Naiden, Norma. "Ratio of Boys to Girls Among Disabled Readers." Reading Teacher, February, 1976, pp. 439-442.

13. Nilsen, P. "New Kinds of Books for New Kinds of Girls." Elementary English, 1973, 50, 1035-1038.

14. O'Donnell, H. S. "ERIC RCS REPORT: Sexism in Language," Elementary English, 1973, 50, 1067-1072.

15. Quirk, T. J. and Medley, D. M. "Race and Subject--matter Influences and Performance on General Education Items of the National Teacher Examination." Research Bulletin 72-43, Educational Testing Service, Princeton, N. J. 1972.

16. Smith, H. "Sexism in Language," Elementary English, 1973, 50, 1067-1072.

17. Tate, Janice M., "Sexual Bias in Science Fiction for Children," Elementary English, Oct. 1973, p. 1061.

18. Taylor, M. "Sex-Role Stereotypes in Children's Readers." Elementary English, 1973.

19. Thetford, M. "The Case for the Career Book in Grades Five to Eight: A Feminist View." Elementary English, 1973, 50, 1059-1060.

20. Tiedt, P. and Semorile, R. "Semantic Discrepancies," Elementary English, 1973, 50, 1065, 1066, 1074.

21. Tiedt, M. "Sexism in Language - An Editor's Plague," Elementary English, 1973, 50, 1073-1074.

22. Tittle, Carol Kehr; McCarthy, Karen; Steckler, Jane. Women and Educational Testing, Educational Testing Service, Princeton, New Jersey, 1974.

23. Weitzman, Lenore. "Sex Bias in Textbooks." Today's Education, Jan-Feb. 75, 49-52.

24. Weitzman, Lenore, et al. "Sex Role Socialization in Picture Books for Pre-School Children." American Journal of Sociology, May 1972, pp. 1125-1150.

25. Women on Words and Images. Dick and Jane as Victims: Sex Stereotyping: in Children's Readers. Women on Words and Images, Princeton, New Jersey, 1972.